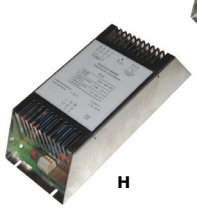
Electronic Ballasts
EVG 200...400W / 230V AC
Lamp-Ballast Combinations

Ballasts for one and two lamp operation

lamp type	lamp operation	lamps per ballast	ballast model	ballast type	page no.
GIA240	rapid start	1	EVG240W/2A	H	27
	rapid start	2	EVG2x[240W]/2A	I	27
	preheat/rapid start	2	EVG2x[240W]/2A -PH	I-PH	28
	preheat/rapid start	1	R-EVG240W/2A -PH	T	29
	preheat/rapid start	2	R-EVG2x[240W]/2A -PH	U	29
NNI201/107XL	rapid start	1	EVG160-200W/2A	E	27
	rapid start	2	EVG2x[220W]/2A	I	27
	preheat start	1	EVG160-200W/2A -PH	E-PH	28
	preheat/rapid start	2	EVG2x[220W]/2A -PH	I-PH	28
	preheat/rapid start	1	R-EVG220W/2A -PH	T	29
	preheat/rapid start	2	R-EVG2x[220W]/2A -PH	U	29
NNI300/147XL	rapid start	1	EVG300W/2,1A	H	27
	rapid start	2	EVG2x[300W]/2,1A	I	27
	preheat start	1	EVG300W/2,1A -PH	H-PH	28
	preheat/rapid start	2	EVG2x[300W]/2,1A -PH	I-PH	28
	preheat/rapid start	1	R-EVG300W/2,1A -PH	T	29
	preheat/rapid start	2	R-EVG2x[300W]/2,1A -PH	U	29
NNI400/147XL	rapid start	1	EVG400W/3,8A	H	27
	preheat start	1	EVG400W/3,8A -PH	H-PH	28
	preheat/rapid start	1	R-EVG400W/3,8A -PH	T	29
TUV240WXPT	rapid start	1	EVG240W/2A	H	27
	rapid start	2	EVG2x[240W]/2A	I	27
	preheat/rapid start	2	EVG2x[240W]/2A -PH	I-PH	28
	preheat/rapid start	1	R-EVG240W/2A -PH	T	29
	preheat/rapid start	2	R-EVG2x[240W]/2A -PH	U	29
TUV260XPT	rapid start	1	EVG270W/3,8A	H	27
	rapid start	2	EVG2x[270W]/3,8A	I	27
	preheat start	1	EVG270W/3,8A -PH	H-PH	28
	preheat/rapid start	1	R-EVG270W/3,8A -PH	T	29
TUV270XPT	rapid start	1	EVG270W/3,8A	H	27
	rapid start	2	EVG2x[270W]/3,8A	I	27
	preheat start	1	EVG270W/3,8A -PH	H-PH	28
	preheat/rapid start	1	R-EVG270W/3,8A -PH	T	29
TUV325XPT	rapid start	1	EVG320W/2,2A	H	27
	rapid start	2	EVG2x[320W]/2,2A	I	27
	preheat start	1	EVG320W/2,2A -PH	H-PH	28
	preheat/rapid start	2	EVG2x[320W]/2,2A -PH	I-PH	28
	preheat/rapid start	1	R-EVG320W/2,2A -PH	T	29
	preheat/rapid start	2	R-EVG2x[320W]/2,2A -PH	U	29
TUV330XPT	rapid start	1	EVG330W/4,8A	H	27
	preheat start	1	EVG330W/4,8A -PH	H-PH	28
	preheat/rapid start	1	R-EVG330W/4,8A -PH	T	29
UNI260	rapid start	1	EVG240W/2A	H	27
	rapid start	2	EVG2x[240W]/2A	I	27
	preheat/rapid start	2	EVG2x[240W]/2A -PH	I-PH	28
	preheat/rapid start	1	R-EVG240W/2A -PH	T	29
	preheat/rapid start	2	R-EVG2x[240W]/2A -PH	U	29

E

E-PH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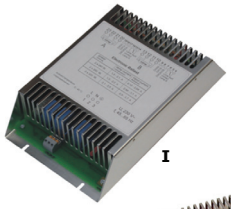
H-PH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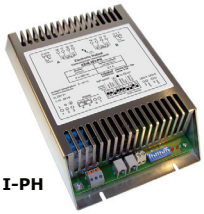
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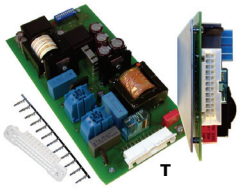
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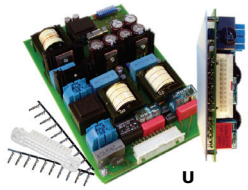
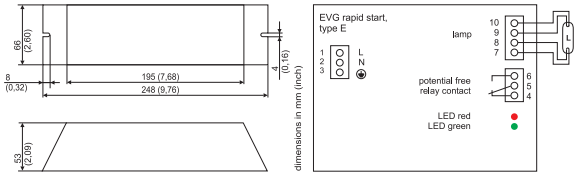

U

Ballasts for other lamp types are available on request.
We can also adapt ballasts to other lamp specifications.

Electronic Ballasts
EVG 200...400W / 230V AC
Rapid Start

Ballasts for one and two lamp operation

ballast type E

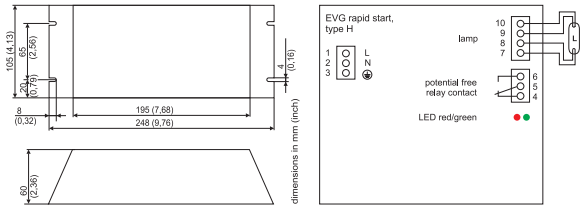


ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG160-200W/2A	175 – 220	0,7 - 1,1	160 - 200	1,85 – 2	NNI201/107XL

These ballasts are intended for applications with less than one switch on cycle per day, otherwise we recommend preheat start ballasts.

mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C	**t_c-temperature:**	max. 50°C
status indication:	operating status indicated by LED potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC				
mounting restrictions:	upright, mains connector at bottom side, see Installation and Operation Instructions (Appendix A) for details			**IP Code:**	IP20
wire gauge:	0,75...1,5mm²; strip length: 10...12mm				

ballast type H

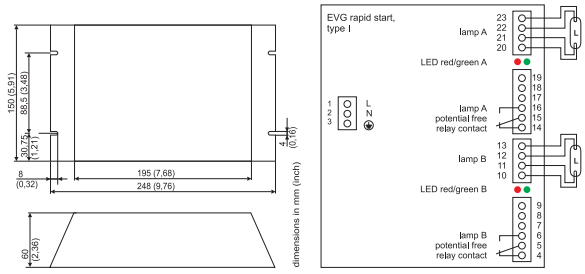


ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG240W/2A	250 - 280	0,99 - 1,35	220 - 250	1,9 - 2,2	UNI260, GIA240, TUV240WXPT
EVG270W/3,8A	280 - 310	1,1 – 1,5	250 -280	3,6 - 4,0	TUV260XPT, TUV270XPT
EVG300W/2,1A	350	1,38 - 1,7	320	2,1 - 2,4	NNI300/147XL
EVG320W/2,2A	350	1,38 - 1,7	320	2,1 - 2,4	TUV325XPT
EVG400W/3,8A	425	1,7 - 2,1	400	3,8	NNI400/147XL
EVG330W/4,8A	370	1,46 - 1,79	330	4,8	TUV330XPT

These ballasts are intended for applications with less than one switch on cycle per day, otherwise we recommend preheat start ballasts.

mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C	**t_c-temperature:**	max. 50°C
status indication:	operating status indicated by LED potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC				
mounting restrictions:	upright, mains connector at bottom side, see Installation and Operation Instructions (Appendix A) for details			IP Code:	IP20
wire gauge:	0,75...1,5mm²; strip length: 10...12mm				

ballast type I



ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG2x[220W]/2A	440 - 480	1,74 - 2,31	200 - 220	1,9 - 2,2	NNI201/107XL
EVG2x[240W]/2A	500 - 560	1,98 - 2,7	220 - 250	1,9 - 2,2	UNI260, GIA240, TUV240WXPT
EVG2x[270W]/3,8A	560 - 620	2,21 - 3	250 -280	3,6 - 4,0	TUV260XPT, TUV270XPT
EVG2x[300W]/2,1A	700	2,76 - 3,38	320	2,1 - 2,4	NNI300/147XL
EVG2x[320W]/2,2A	700	2,76 - 3,38	320	2,1 - 2,4	TUV325XPT

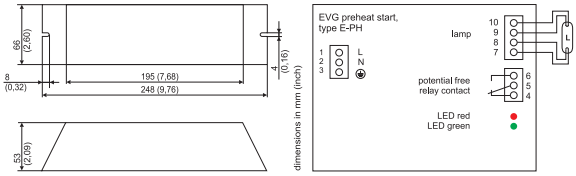
These ballasts are intended for applications with less than one switch on cycle per day, otherwise we recommend preheat start ballasts.

mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C	**t_c-temperature:**	max. 50°C
status indication:	operating status indicated by LED, potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC				
mounting restrictions:	upright, mains connector at bottom side, see Installation and Operation Instructions (Appendix A) for details			IP Code:	IP20
wire gauge:	0,75...1,5mm²; strip length: 10...12mm (terminals 4-9/14-19: 0,5...1mm²; strip length: 8mm)				

Electronic Ballasts
EVG 200...400W / 230V AC
Preheat/Rapid Start

Ballasts for one and two lamp operation

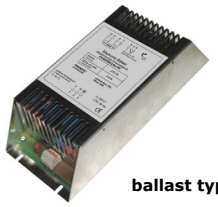
ballast type E-PH



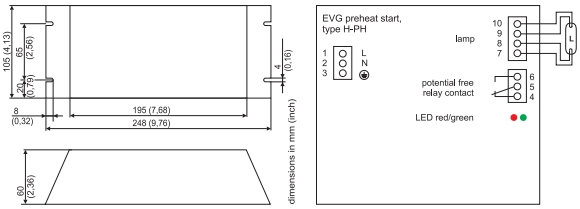
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	preheat current [A]	preheat time [s]	lamp type
EVG160-200W/2A -PH	175 – 220	0,7 - 1,1	160 - 200	1,85 – 2	2	12	NNI201/107XL

Preheat values cannot be changed by customer.

mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C	**t_C-temperature:**	max. 50°C
status indication:	operating status indicated by LED potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC				
mounting restrictions:	upright, mains connector at bottom side, see Installation and Operation Instructions (Appendix A) for details			**IP Code:**	IP20
wire gauge:	0,75...1,5mm²; strip length: 10...12mm				



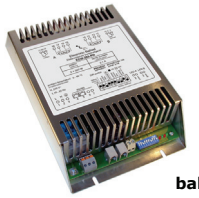
ballast type H-PH



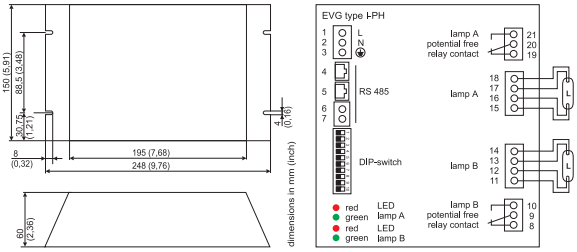
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	preheat current [A]	preheat time [s]	lamp type
EVG270W/3,8A -PH	280 - 310	1,1 – 1,5	250 -280	3,6 - 4,0	3,8	on request	TUV260XPT, TUV270XPT
EVG300W/2,1A -PH	350	1,38 - 1,7	320	2,1 - 2,4	2	12	NNI300/147XL
EVG320W/2,2A -PH	350	1,38 - 1,7	320	2,1 - 2,4	2,3	12	TUV325XPT
EVG400W/3,8A -PH	425	1,7 - 2,1	400	3,8	3,8	20	NNI400/147XL
EVG330W/4,8A -PH	370	1,46 - 1,79	330	4,8	5	20	TUV330XPT

Preheat values cannot be changed by customer.

mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C	**t_C-temperature:**	max. 50°C
status indication:	operating status indicated by LED potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC				
mounting restrictions:	upright, mains connector at bottom side, see Installation and Operation Instructions (Appendix A) for details			IP Code:	IP20
wire gauge:	0,75...1,5mm²; strip length: 10...12mm				



ballast type I-PH



ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG2x[220W]/2A -PH	440 - 480	1,74 - 2,31	200 - 220	1,9 - 2,2	NNI201/107XL
EVG2x[240W]/2A -PH	500 - 560	1,98 - 2,7	220 - 250	1,9 - 2,2	UNI260, GIA240, TUV240WXPT
EVG2x[300W]/2,1A -PH	660	2,6 - 3,2	300	2,1	NNI300/147XL
EVG2x[320W]/2,2A -PH	700	2,76 - 3,38	320	2,1 - 2,4	TUV325XPT

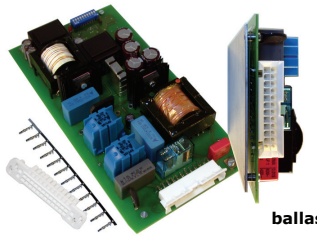
Ballasts are operating with only one lamp connected.
Preheating can be deactivated/activated manually.
Microprocessor controlled, two operating modes (to be selected by DIP-switch): local control via DIP-switch settings or remote control via serial bus RS485.

⇒ for RS485 Control / Local Control details see "Communication Generals for Ballast Control" in "Communication Generals for Ballast Control" page no. 48

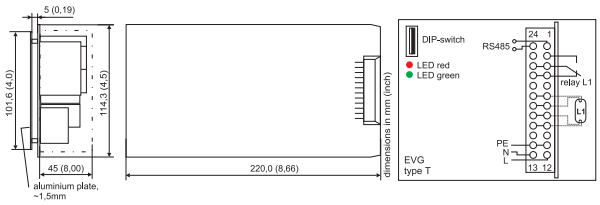
mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C	**t_C-temperature:**	max. 50°C
status indication:	operating status indicated by LED, potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC RS485 for remote status indication and controlling				
mounting restrictions:	upright, mains connector at bottom side, see Installation and Operation Instructions (Appendix A) for details			IP Code:	IP20
wire gauge:	0,75...1,5mm²; strip length: 10...12mm				

Electronic Ballasts
EVG 200...400W / 230V AC
Preheat/Rapid Start

Ballasts for one and two lamp operation



ballast type T

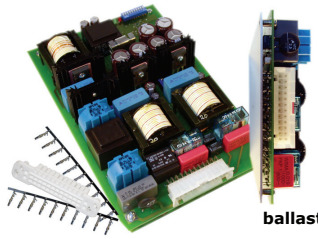


ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
R-EVG220W/2A -PH	230 - 250	0,91 - 1,2	200 - 220	1,9 - 2,2	NNI201/107XL
R-EVG240W/2A -PH	250 - 280	0,99 - 1,35	220 - 250	1,9 - 2,2	UNI260, GIA240, TUV240WXPT
R-EVG270W/3,8A -PH	280 - 310	1,1 – 1,5	250 -280	3,6 - 4,0	TUV260XPT, TUV270XPT
R-EVG300W/2,1A -PH	330	1,3 - 1,6	300	2,1	NNI300/147XL
R-EVG320W/2,2A -PH	350	1,38 - 1,7	320	2,1 - 2,4	TUV325XPT
R-EVG400W/3,8A -PH	425	1,7 - 2,1	400	3,8	NNI400/147XL
R-EVG330W/4,8A -PH	370	1,46 - 1,79	330	4,8	TUV330XPT

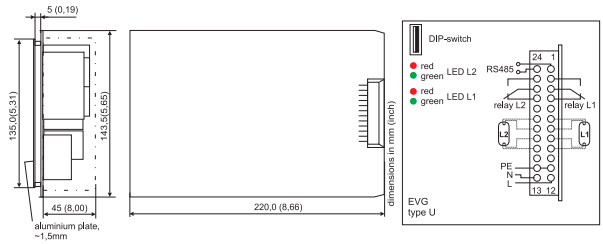
Preheating can be deactivated/activated manually.
Microprocessor controlled, two operating modes (to be selected by DIP-switch):
local control via DIP-switch settings or remote control via serial bus RS485.

⇒ for RS485 Control / Local Control details see "Communication Generals for Ballast Control" in "Communication Generals for Ballast Control" page no. 48

mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C		
status indication:	operating status indicated by LED potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC; RS485 for status indication and controlling				
mounting restrictions:	rack mounting **with forced cooling**, see Installation and Operation Instructions (Appendix A) for details			**IP Code:**	IP00
connections:	to be used with MOLEX JUNIOR FIT connector (ZED 500-008) and 12 MINI FIT crimp contacts (ZED 500-007) (sold separately) Recommendation for crimping: Tool Set SC-MK - see "Crimp Tools and Accessories for Ceramic Lamp Socket and Molex Plug Contacts" at page 79				
wire gauge:	1...1,5mm²; strip length: 3...3,5mm				



ballast type U



ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
R-EVG2x[220W]/2A -PH	440 - 480	1,74 - 2,31	200 - 220	1,9 - 2,2	NNI201/107XL
R-EVG2x[240W]/2A -PH	500 - 560	1,98 - 2,7	220 - 250	1,9 - 2,2	UNI260, GIA240, TUV240WXPT
R-EVG2x[300W]/2,1A -PH	660	2,6 - 3,2	300	2,1 - 2,4	NNI300/147XL
R-EVG2x[320W]/2,2A -PH	700	2,76 - 3,38	320	2,1 - 2,4	TUV325XPT

Ballasts are operating with only one lamp connected.
Preheating can be deactivated/activated manually.
Microprocessor controlled, two operating modes (to be selected by DIP-switch):
local control via DIP-switch settings or remote control via serial bus RS485.

⇒ for RS485 Control / Local Control details see "Communication Generals for Ballast Control" in "Communication Generals for Ballast Control" page no. 48

mains voltage:	230V AC ± 10%	**mains frequency:**	45...65Hz	**efficiency:**	> 90%
operating frequency:	30...50kHz	**ambient temperature:**	0...40°C		
status indication:	operating status indicated by LED potential free relay contacts, load: 50...200mA at 24...120V AC; 50...500mA at 5...60V DC; RS485 for status indication and controlling				
mounting restrictions:	rack mounting **with forced cooling**, see Installation and Operation Instructions (Appendix A) for details			**IP Code:**	IP00
connections:	to be used with MOLEX JUNIOR FIT connector (ZED 500-008) and 20 MINI FIT crimp contacts (ZED 500-007) (sold separately) Recommendation for crimping: Tool Set SC-MK - see "Crimp Tools and Accessories for Ceramic Lamp Socket and Molex Plug Contacts" at page 79				
wire gauge:	1...1,5mm²; strip length: 3...3,5mm				